

U.S. Patent Application No. 10/678,834
Response to Restriction Requirement

Docket No. 7463-30

CLAIMS:

What is claimed is:

1. (original) An method of forming a metallized dam, comprising the steps of:
 applying a metallic adhesive to a printed circuit board having at least one dam pattern thereon; and
 applying a conformal coating about a dam formed around the at least one dam pattern.
2. (original) The method of claim 1, wherein the step of applying the metallic adhesive comprises the step of applying solder paste to the at least one dam pattern.
3. (original) The method claim 2, wherein the step of applying the metallic adhesive further comprises the step of reflowing the solder paste onto the at least one dam pattern.
4. (original) The method of claim 1, wherein the step of applying the metallic adhesive comprises the step of applying solder preform to the at least one dam pattern.
5. (original) The method claim 4, wherein the step of applying the metallic adhesive further comprises the step of reflowing the solder preform on to the at least one dam pattern.
6. (original) The method of claim 1, wherein the method further comprises the step of placing a semiconductor die within the dam before the step of applying the conformal coating.
7. (original) The method of claim 6, wherein the method further comprises the step of wiring bonding the semiconductor die to bonding pads within the dam before the step of applying the conformal coating.

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8. (original) The method of claim 1, wherein the step of applying the metallic adhesive comprises the step of screen printing solder paste onto the at least one dam pattern.

9. (original) The method of claim 8, wherein the at least one dam pattern is electrically non-functional and the step of screen printing is adjustable to provide a customized height for the dam.

10. (original) The method of claim 1, wherein the dam has a clearance requirement of less than 47 mils.

11. (original) The method of claim 1, wherein the step of applying a conformal coating about the dam comprises at least one among applying the conformal coating within the dam and applying the conformal coating around the dam.

12. (original) A method of forming a dam, comprising the steps of:
circumscribing a predetermined area on a substrate with a metallized trace pattern;
applying solder to the metallized trace pattern; and
reflowing the solder to form the dam using the solder.

13. (original) The method of claim 12, wherein the step of applying solder comprises the step of applying solder paste to the metallized trace pattern.

14. (original) The method of claim 12, wherein the step of applying the solder comprises the step of applying solder preform to the metallized trace pattern.

15. (original) The method of claim 12, wherein the method further comprises the step of applying a conformal coating about the dam.

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16. (original) The method of claim 12, wherein the method further comprises the step of placing a semiconductor die within the dam.

17. (Cancelled) A processed printed circuit board, comprising:
a predetermined area on a substrate defined by a metallized trace pattern; and

solder applied to the metallized trace pattern to form a dam around the predetermined area.

18. (Cancelled) The processed printed circuit board of claim 17, wherein the board further comprises an electronic component within the predetermined area.

19. (Cancelled) The processed printed circuit board of claim 17, wherein the board further comprises a conformal coating applied to the predetermined area.

20. (Cancelled) The processed printed circuit board of claim 18, wherein the board further comprises a conformal coating applied to the predetermined area.

21. (added) An method of forming a metallized dam, comprising the steps of:

applying a metallic adhesive to a printed circuit board having at least one dam pattern thereon; and

forming the metallized dam on the at least one dam pattern using the metallic adhesive.

22. (added) The method of claim 21, wherein the method further comprises the step of applying a conformal coating about the metallized dam.

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23. (added) The method of claim 21, wherein the step of applying the metallic adhesive comprises the step of applying solder paste to the at least one dam pattern.

24. (added) The method of claim 22, wherein the method further comprises the step of placing a semiconductor die within the metallized dam before the step of applying the conformal coating.

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 applying a conformal coating about a dam formed around the at least one dam pattern.
2. (original) The method of claim 1, wherein the step of applying the metallic adhesive comprises the step of applying solder paste to the at least one dam pattern.
3. (original) The method claim 2, wherein the step of applying the metallic adhesive further comprises the step of reflowing the solder paste onto the at least one dam pattern.
4. (original) The method of claim 1, wherein the step of applying the metallic adhesive comprises the step of applying solder preform to the at least one dam pattern.
5. (original) The method claim 4, wherein the step of applying the metallic adhesive further comprises the step of reflowing the solder preform on to the at least one dam pattern.
6. (original) The method of claim 1, wherein the method further comprises the step of placing a semiconductor die within the dam before the step of applying the conformal coating.
7. (original) The method of claim 6, wherein the method further comprises the step of wiring bonding the semiconductor die to bonding pads within the dam before the step of applying the conformal coating.

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8. (original) The method of claim 1, wherein the step of applying the metallic adhesive comprises the step of screen printing solder paste onto the at least one dam pattern.

9. (original) The method of claim 8, wherein the at least one dam pattern is electrically non-functional and the step of screen printing is adjustable to provide a customized height for the dam.

10. (original) The method of claim 1, wherein the dam has a clearance requirement of less than 47 mils.

11. (original) The method of claim 1, wherein the step of applying a conformal coating about the dam comprises at least one among applying the conformal coating within the dam and applying the conformal coating around the dam.

12. (original) A method of forming a dam, comprising the steps of:
circumscribing a predetermined area on a substrate with a metallized trace pattern;
applying solder to the metallized trace pattern; and
reflowing the solder to form the dam using the solder.

13. (original) The method of claim 12, wherein the step of applying solder comprises the step of applying solder paste to the metallized trace pattern.

14. (original) The method of claim 12, wherein the step of applying the solder comprises the step of applying solder preform to the metallized trace pattern.

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a predetermined area on a substrate defined by a metallized trace pattern; and
solder applied to the metallized trace pattern to form a dam around the predetermined area.
18. (Cancelled) The processed printed circuit board of claim 17, wherein the board further comprises an electronic component within the predetermined area.
19. (Cancelled) The processed printed circuit board of claim 17, wherein the board further comprises a conformal coating applied to the predetermined area.
20. (Cancelled) The processed printed circuit board of claim 18, wherein the board further comprises a conformal coating applied to the predetermined area.
21. (added) An method of forming a metallized dam, comprising the steps of:
applying a metallic adhesive to a substrate having at least one dam pattern thereon; and
forming the metallized dam on the at least one dam pattern using the metallic adhesive.
22. (added) The method of claim 21, wherein the method further comprises the step of applying a conformal coating about the metallized dam.

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23. (added) The method of claim 21, wherein the step of applying the metallic adhesive comprises the step of applying solder paste to the at least one dam pattern.

24. (added) The method of claim 22, wherein the method further comprises the step of placing a semiconductor die within the metallized dam before the step of applying the conformal coating.